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IN THE CLAIMS:

1.-3. (Canceled)

4. (currently amended) A system of manufacturing to control the customized configuration of an implantable medical device (IMD), comprising:

a web-enabled information network;

a storage device capable of receiving information from the information network to receive patient-specific data;

a processing circuit coupled to the storage device to select components to be integrated in the initial manufacturing of the IMD based on the patient-specific data; and

software components loaded into the storage device, the software components being selected by the processing circuit as one or more of the components selected for use in the configuration of the IMD, wherein the software components are selected from the group consisting of software and/or firmware-implemented digital signal processing processes, filters, and signal differentiation processes, and wherein the signal differentiation processes include analyzing means for analyzing cardiac waveforms, wherein said waveforms are selected from the group consisting of poly-morphic ventricular tachycardia, poly-morphic ventricular fibrillation, mono-morphic ventricular tachycardia, mono-morphic ventricular fibrillation, atrial flutter, atrial tachyarrhythmia, atrial fibrillation, premature atrial contractions (PACs), premature ventricular contractions (PVCs), sinus tachycardia, left bundle-branch block (LBBB), right bundle branch block (RBBB), antegrade p-waves, and-retrograde p-waves.

5. (Previously presented) The system of Claim 4, wherein the processing circuit includes parameter selection means for selecting predetermined parameters to be downloaded into the IMD.

6. (Original) The system of Claim 5, wherein the predetermined parameters are selected from the group consisting of a patient identifier, a device type, model number, a serial number, a name of an implanting physician, a name of a sales representative, a name of an implanting institution, a data of implant, a customized patient alarm, and a customized message in a selected language.

- 7. (Previously presented) The system of Claim 4, and further including a manufacturing inventory control system coupled to receive information indicative of the selected components, wherein the received information is used during manufacture of the IMD.
- 8. (Original) The system of Claim 7, and further including a testing system coupled to receive information indicative of the selected components, wherein the received information is used in testing a manufactured IMD.
- 9. (Original) The system of Claim 8, wherein the received information includes signals generated from the patient-specific data applied to inputs of the IMD during the testing of the manufactured IMD.
- 10. (Original) The system of Claim 9, wherein the processing circuit includes means for monitoring status of an IMD being manufactured and tested, and further including means for transferring the status via the web-enabled information network to a remote system.
- 11. (Previously presented) The system of Claim 4, wherein the processing circuit includes means for selecting hardware components to be used during manufacture of the IMD based on the patient-specific data.
- 12. (Previously presented) The system of Claim 4, and further including means for monitoring inventory levels of the selected components and for

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ordering additional ones of the selected components when the inventory levels are within a predetermined range.

- 13. (Previously presented) The system of Claim 4, and further including means for receiving an order to manufacture the IMD via the web-enabled information network.
- 14. (Original) The system of Claim 13, and further including means for automatically shipping a manufactured IMD in response to the order.
- 15. (Previously presented) The system of Claim 4, wherein the processing circuit is integrated within a programmer, and further comprising a telemetry system capable of downloading the ones of the selected components to the IMD.
- 16. (Previously presented) The system of Claim 4, and further including a programmer coupled to the storage device to download ones of the selected components to the IMD.
- 17.-32. (Canceled)